



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/015,613

12/17/2001

Patrick Baudisch

132954

5897

65575

7590

05/13/2008

OLIFF & BERRIDGE, PLC

P.O. BOX 320850

ALEXANDRIA, VA 22320-4850

EXAMINER

RICHER, AARON M

ART UNIT

PAPER NUMBER

2628

MAIL DATE

DELIVERY MODE

05/13/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/015,613	Applicant(s) BAUDISCH, PATRICK	
	Examiner AARON M. RICHER	Art Unit 2628	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 April 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-27 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-27 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>20080507</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

1. Applicant's arguments with respect to claims 1-27 have been considered but are moot in view of the new ground(s) of rejection.

Double Patenting

2. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

3. Claims 1-5, 7, 11-13, 16-18, and 22-25 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-8 of U.S. Patent No. 7,333,071. Although the conflicting claims are not identical, they are not patentably distinct from each other because claims 1, 4, 7, and 8 of the patent all disclose:

“providing first and second portions of the source image to be displayed on the first and second display areas respectively wherein the second portion of the source image is a scaled portion of the source image such that when the first and second portions of the source image are displayed on the first and second display areas the resulting displayed image appears substantially continuous to a viewer situated to view the displayed image and the displayed resolution of the first portion of the source image is different from the displayed resolution of the second portion of the source image”

or some similar variation thereof, and this renders obvious claims 1-5, 7, 11-13, 16-18, and 22-25 of the instant application.

Below, one can see the mapping of claim 1 of the patent to claim 1 of the application, with the patent's language in quotation marks inside parentheses, and examiner's comments outside the quotations marks in the parentheses. Looking at claim 1, the patent renders obvious:

A display (“first and second display areas”) for displaying a single perceived continuous image across two display devices (“displayed image appears substantially continuous”) such that a portion of the single image is displayed on each device comprising:

a) a first display device having a first display area with a first display resolution and a first boundary (“displayed on the first and second display areas”, a resolution and boundary are inherent to a device), so arranged and adapted to receive first image information data from a first image processor (this is not disclosed in the patent but separate image processors for display devices are known in the art),

b) a second display device having a second display area with a second display resolution, wherein the second display resolution is different from the first display resolution (“the displayed resolution of the first portion of the source image is different from the displayed resolution of the second portion of the source image”), and a second boundary (“displayed on the first and second display areas”, a resolution and boundary are inherent to a device), so arranged and adapted to receive second image information data from a second image processor (this is not disclosed in the patent but separate image processors for display devices are known in the art), and

c) an image replicator configured to generate different first and second scale factors necessary to scale the first and second image information data for display on the first and second display devices, respectively, wherein the first and second image information data is scaled by the first and second scale factors for display on the respective first and second display devices (“the second portion of the source image is a scaled portion of the source image such that when the first and second portions of the source image are displayed on the first and second display areas the resulting displayed image appears substantially continuous”, while only one scaled portion, which inherently involves a scale factor, is disclosed, it would be inherent that a second different scale factor be used if the resolutions are different), and

d) the first and second display devices being so constructed and arranged such that when the first image information data is displayed on the first display device and the second image information data is displayed on the second display device the resulting displayed single image appears to be substantially continuous across the first and

second display areas to a viewer situated to view the image (“the resulting displayed image appears substantially continuous to a viewer”) and the displayed resolution of the portion of the image displayed on the first display area is different than the displayed resolution of the portion of the image displayed on the second display area (“the displayed resolution of the first portion of the source image is different from the displayed resolution of the second portion of the source image”).

4. Claims 11 and 22 of the application recite limitations similar to claim 1 of the application and therefore the same analysis recited above can be applied to them.

5. As to claims 2, 3, 12, 13, 23, and 24 of the application, LCDs and projectors are known in the art and it would be obvious to one skilled in the art to use them as displays for the invention described in claim 1 of the patent.

6. As to claims 4, 5, and 25 of the application, claim 1 of the patent suggests that the display areas are contiguous and adjacent (“the resulting displayed image appears substantially continuous”).

7. As to claims 7, 17, and 18 of the application, claim 4 of the patent suggests that the method works over “n” display areas where n is greater than 1, meaning a second, third, or fifth resolution and display would also be suggested. Even if it were not suggested by claim 4 of the patent, adding a second, third, or fifth resolution and display would be an obvious modification of claim 1 of the patent.

8. As to claim 16 of the application, claim 1 of the patent suggests that two displays and resolutions are used (“first and second display areas”, “the displayed resolution of

the first portion of the source image is different from the displayed resolution of the second portion of the source image”)

9. Claims 6, 8, 10, 14, 15, 19, 26, and 27 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-8 of U.S.

Patent No. 7,333,071 in view of Gennetten (U.S. Patent 6,812,907)

10. Claims 6, 14, 26, and 27 all involve one display area surrounding a second display area, which is not expressly disclosed in claims 1-8 of U.S. Patent No. 7,333,071. Gennetten, however, discloses a display wherein the first display area is surrounded by the second display area (figs. 2 and 3). The motivation for this arrangement is to enable detailed view of an image without unnecessarily wasting power, since a surrounding screen can be turned off (col. 1, line 61-col. 2, line 19). It would have been obvious to one skilled in the art to modify claims 1-8 of U.S. Patent No. 7,333,071 to display an image continuously over one device that surrounds another in order to enable detailed view of that image, but also save power as taught by Gennetten.

11. As to claims 8, 10, 15, and 19, claims 1-8 of U.S. Patent No. 7,333,071 disclose a multiple display system but not one with surrounding displays. Gennetten further discloses a display wherein the first display area fully surrounds the second display area as described in the rejection to claim 6. The teachings of Gennetten can be equivalently applied to a three display system, creating a three display system in which two displays are surrounded by another display, and in which a display is surrounded by

a display which is surrounded by another display. Motivation for this combination can be found in the rejection to claim 6.

12. Claim 9 is rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-8 of U.S. Patent No. 7,333,071 in view of Gennetten and Ohzawa (U.S. Patent 6,803,884).

13. As to claim 9, claims 1-8 of U.S. Patent No. 7,333,071 and Gennetten fail to disclose, but Ohzawa discloses a display wherein the second and third display areas are spaced apart with a portion of the first display area interposed there between (fig. 2; note that part of image m1 is between the other images, while part is above or below the space between the other images). This interposed display is high resolution (col. 5, lines 4-20; LCD 11 is the center LCD in fig. 1) and the advantage of the interposed high resolution display is that it can be used to create a sharp projection image (col. 5, lines 4-20). It would have been obvious to one skilled in the art to modify claims 1-8 of U.S. Patent No. 7,333,071 and Gennetten to use an interposed display with higher resolution than the other two in order to create a sharp projection image as taught by Ohzawa.

14. Claims 20 and 21 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-8 of U.S. Patent No. 7,333,071 in view of Ohzawa (U.S. Patent 6,803,884).

15. As to claims 20 and 21, see the rejection to claim 9 above. Similar rationale apply.

16. Claims 1-5, 7, 11-13, 16-18, and 22-25 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-

22 of copending Application No. 10/015,642. Although the conflicting claims are not identical, they are not patentably distinct from each other because claims 1, 12, and 22 of the co-pending application all disclose:

“transforming at least one of the associated image information data where at least one of the associated image information data is a transformed portion of the image information data such that when images are displayed on each display area from the associated image information data the resulting displayed image on the at least two display areas appears substantially continuous to a viewer situated to view the displayed image and the displayed resolution of the image displayed on at least one of the at least two display areas is different from the displayed resolution of the image displayed on at least one other of the at least two display areas.”

or some similar variation thereof, and this renders obvious claims 1-5, 7, 11-13, 16-18, and 22-25 of the instant application.

Below, one can see the mapping of claim 1 of the co-pending application to claim 1 of the instant application, with the patent's language in quotation marks inside parentheses, and examiner's comments outside the quotations marks in the parentheses. Looking at claim 1, the co-pending application renders obvious:

A display (“at least two display areas”) for displaying a single perceived continuous image across two display devices (“resulting displayed image on the at least two display areas appears substantially continuous”) such that a portion of the single image is displayed on each device comprising:

a) a first display device having a first display area with a first display resolution and a first boundary (“displayed on at least one other of the at least two display areas”, a resolution and boundary are inherent to a device), so arranged and adapted to receive first image information data from a first image processor (this is not disclosed in the co-pending application but separate image processors for display devices are known in the art),

b) a second display device having a second display area with a second display resolution, wherein the second display resolution is different from the first display resolution (“the displayed resolution of the image displayed on at least one of the at least two display areas is different from the displayed resolution of the image displayed on at least one other of the at least two display areas”), and a second boundary (“displayed on at least one other of the at least two display areas”, a resolution and boundary are inherent to a device), so arranged and adapted to receive second image information data from a second image processor (this is not disclosed in the co-pending application but separate image processors for display devices are known in the art), and

c) an image replicator configured to generate different first and second scale factors necessary to scale the first and second image information data for display on the first and second display devices, respectively, wherein the first and second image information data is scaled by the first and second scale factors for display on the respective first and second display devices (transforming an image to two displays with different resolutions inherently involves multiple scale factors), and

d) the first and second display devices being so constructed and arranged such that when the first image information data is displayed on the first display device and the second image information data is displayed on the second display device the resulting displayed single image appears to be substantially continuous across the first and second display areas to a viewer situated to view the image (“displayed image on the at least two display areas appears substantially continuous”) and the displayed resolution of the portion of the image displayed on the first display area is different than the displayed resolution of the portion of the image displayed on the second display area (“the displayed resolution of the image displayed on at least one of the at least two display areas is different from the displayed resolution of the image displayed on at least one other of the at least two display areas”).

17. Claims 11 and 22 of the application recite limitations similar to claim 1 of the application and therefore the same analysis recited above can be applied to them.

18. As to claims 2, 3, 12, 13, 23, and 24 of the application, LCDs and projectors are known in the art and it would be obvious to one skilled in the art to use them as displays for the invention described in claim 1 of the co-pending application.

19. As to claims 4, 5, and 25 of the application, claim 1 of the co-pending application suggests that the display areas are contiguous and adjacent (“displayed image on the at least two display areas appears substantially continuous”).

20. As to claims 7, 17, and 18 of the application, claim 1 of the co-pending application suggests that the method works for “at least two display areas”, meaning a second, third, or fifth resolution and display would also be suggested.

21. As to claim 16 of the application, claim 1 of the co-pending application suggests that two displays and resolutions are used ("the displayed resolution of the image displayed on at least one of the at least two display areas is different from the displayed resolution of the image displayed on at least one other of the at least two display areas")

22. Claims 6, 8, 10, 14, 15, 19, 26, and 27 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-22 of co-pending application 10/015,642 in view of Gennetten (U.S. Patent 6,812,907)

23. Claims 6, 14, 26, and 27 all involve one display area surrounding a second display area, which is not expressly disclosed in claims 1-22 of co-pending application 10/015,642. Gennetten, however, discloses a display wherein the first display area is surrounded by the second display area (figs. 2 and 3). The motivation for this arrangement is to enable detailed view of an image without unnecessarily wasting power, since a surrounding screen can be turned off (col. 1, line 61-col. 2, line 19). It would have been obvious to one skilled in the art to modify claims 1-22 of co-pending application 10/015,642 to display an image continuously over one device that surrounds another in order to enable detailed view of that image, but also save power as taught by Gennetten.

24. As to claims 8, 10, 15, and 19, claims 1-22 of co-pending application 10/015,642 disclose a multiple display system but not one with surrounding displays. Gennetten further discloses a display wherein the first display area fully surrounds the second display area as described in the rejection to claim 6. The teachings of Gennetten can be equivalently applied to a three display system, creating a three display system in

which two displays are surrounded by another display, and in which a display is surrounded by a display which is surrounded by another display. Motivation for this combination can be found in the rejection to claim 6.

25. Claim 9 is rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-22 of co-pending application 10/015,642 in view of Gennetten and Ohzawa (U.S. Patent 6,803,884).

26. As to claim 9, claims 1-22 of co-pending application 10/015,642 and Gennetten fail to disclose, but Ohzawa discloses a display wherein the second and third display areas are spaced apart with a portion of the first display area interposed there between (fig. 2; note that part of image m1 is between the other images, while part is above or below the space between the other images). This interposed display is high resolution (col. 5, lines 4-20; LCD 11 is the center LCD in fig. 1) and the advantage of the interposed high resolution display is that it can be used to create a sharp projection image (col. 5, lines 4-20). It would have been obvious to one skilled in the art to modify claims 1-22 of co-pending application 10/015,642 and Gennetten to use an interposed display with higher resolution than the other two in order to create a sharp projection image as taught by Ohzawa.

27. Claims 20 and 21 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-22 of co-pending application 10/015,642 in view of Ohzawa (U.S. Patent 6,803,884).

28. As to claims 20 and 21, see the rejection to claim 9 above. Similar rationale applies.

The above is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

29. Claims 1-5, 7, 11-13, 16-18, and 22-25 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-22 of copending Application No. 10/015,680. Although the conflicting claims are not identical, they are not patentably distinct from each other because claims 1, 12, and 21 of the co-pending application all disclose:

“a system for displaying a perceived continuous image across at least two display areas, each display area having a given display resolution and a given pixel size and the display resolution of at least one display area is different than the display resolution of at least one other display area such that the pixel size of at least one display area is different than the pixel size of at least one other display area comprising”

“a viewer associated with each display area, so constructed and arranged to receive the display associated image information data associated with the same display area from the image replicator, which receives the display associated image information data wherein at least one viewer transforms the received display associated image information data such that when images are displayed on each display area using the display associated image information data the display image is continuous within a tolerance value such that the sizes of the portions of the display image on each of the at least one display area appear to be similar to a viewer situated to view the display image and the display resolution.”

or some similar variation thereof, and this renders obvious claims 1-5, 7, 11-13, 16-18, and 22-25 of the instant application.

Below, one can see the mapping of claim 1 of the co-pending application to claim 1 of the instant application, with the patent's language in quotation marks inside parentheses, and examiner's comments outside the quotations marks in the parentheses. Looking at claim 1, the co-pending application renders obvious:

A display ("at least two display areas") for displaying a single perceived continuous image across two display devices ("the display image is continuous within a tolerance value") such that a portion of the single image is displayed on each device comprising:

a) a first display device having a first display area with a first display resolution and a first boundary ("each display area having a given display resolution", also a resolution and boundary are inherent to a device), so arranged and adapted to receive first image information data from a first image processor (this is not disclosed in the co-pending application but separate image processors for display devices are known in the art),

b) a second display device having a second display area with a second display resolution, wherein the second display resolution is different from the first display resolution ("the display resolution of at least one display area is different than the display resolution of at least one other display area"), and a second boundary ("each display area having a given display resolution", also a resolution and boundary are inherent to a device), so arranged and adapted to receive second image information

data from a second image processor (this is not disclosed in the co-pending application but separate image processors for display devices are known in the art), and

c) an image replicator configured to generate different first and second scale factors necessary to scale the first and second image information data for display on the first and second display devices, respectively, wherein the first and second image information data is scaled by the first and second scale factors for display on the respective first and second display devices (transforming an image to two displays with different resolutions inherently involves multiple scale factors), and

d) the first and second display devices being so constructed and arranged such that when the first image information data is displayed on the first display device and the second image information data is displayed on the second display device the resulting displayed single image appears to be substantially continuous across the first and second display areas to a viewer situated to view the image (“displaying a perceived continuous image across at least two display areas”) and the displayed resolution of the portion of the image displayed on the first display area is different than the displayed resolution of the portion of the image displayed on the second display area (“the display resolution of at least one display area is different than the display resolution of at least one other display area”).

30. Claims 11 and 22 of the application recite limitations similar to claim 1 of the application and therefore the same analysis recited above can be applied to them.

31. As to claims 2, 3, 12, 13, 23, and 24 of the application, LCDs and projectors are known in the art and it would be obvious to one skilled in the art to use them as displays for the invention described in claim 1 of the co-pending application.

32. As to claims 4, 5, and 25 of the application, claim 1 of the co-pending application suggests that the display areas are contiguous and adjacent (“displaying a perceived continuous image across at least two display areas”).

33. As to claims 7, 17, and 18 of the application, claim 1 of the co-pending application suggests that the method works for “at least two display areas”, meaning a second, third, or fifth resolution and display would also be suggested.

34. As to claim 16 of the application, claim 1 of the co-pending application suggests that two displays and resolutions are used (“the display resolution of at least one display area is different than the display resolution of at least one other display area”).

35. Claims 6, 8, 10, 14, 15, 19, 26, and 27 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-21 of co-pending application 10/015,680 in view of Gennetten (U.S. Patent 6,812,907)

36. Claims 6, 14, 26, and 27 all involve one display area surrounding a second display area, which is not expressly disclosed in claims 1-21 of co-pending application 10/015,680. Gennetten, however, discloses a display wherein the first display area is surrounded by the second display area (figs. 2 and 3). The motivation for this arrangement is to enable detailed view of an image without unnecessarily wasting power, since a surrounding screen can be turned off (col. 1, line 61-col. 2, line 19). It would have been obvious to one skilled in the art to modify claims 1-21 of co-pending

application 10/015,680 to display an image continuously over one device that surrounds another in order to enable detailed view of that image, but also save power as taught by Gennetten.

37. As to claims 8, 10, 15, and 19, claims 1-21 of co-pending application 10/015,680 disclose a multiple display system but not one with surrounding displays. Gennetten further discloses a display wherein the first display area fully surrounds the second display area as described in the rejection to claim 6. The teachings of Gennetten can be equivalently applied to a three display system, creating a three display system in which two displays are surrounded by another display, and in which a display is surrounded by a display which is surrounded by another display. Motivation for this combination can be found in the rejection to claim 6.

38. Claim 9 is rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-21 of co-pending application 10/015,680 in view of Gennetten and Ohzawa (U.S. Patent 6,803,884).

39. As to claim 9, claims 1-21 of co-pending application 10/015,680 and Gennetten fail to disclose, but Ohzawa discloses a display wherein the second and third display areas are spaced apart with a portion of the first display area interposed there between (fig. 2; note that part of image m1 is between the other images, while part is above or below the space between the other images). This interposed display is high resolution (col. 5, lines 4-20; LCD 11 is the center LCD in fig. 1) and the advantage of the interposed high resolution display is that it can be used to create a sharp projection image (col. 5, lines 4-20). It would have been obvious to one skilled in the art to modify

claims 1-21 of co-pending application 10/015,680 and Gennetten to use an interposed display with higher resolution than the other two in order to create a sharp projection image as taught by Ohzawa.

40. Claims 20 and 21 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-21 of co-pending application 10/015,680 in view of Ohzawa (U.S. Patent 6,803,884).

41. As to claims 20 and 21, see the rejection to claim 9 above. Similar rationale applies.

The above is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claim Objections

42. Claim 9 is objected to because of the following informalities: Claim 9, line 1 recites "wherein in the surrounded display areas are spaced apart". The word "in" should be removed so the claim is grammatically correct.

43. Claim 20 is objected to because of the following informalities: Claim 20, line 1 recites "wherein in the surrounded display areas are spaced apart". The word "in" should be removed so the claim is grammatically correct.

44. Also, the claim is dependent on claim 18, which does not recite "surrounded display areas", and so the phrase "the surrounded display areas" in claim 20, line 1 lacks antecedent basis. It appears that the claim should have been dependent on claim 19, which does recite display areas that are surrounded. Since these appear to be simple typographical errors, and the examiner can easily determine what was meant by

the claim, the claim is objected to rather than rejected under 35 USC 112. Appropriate correction is required.

45. Claim 21 is objected to because of the following informalities: Claim 21 recites a portion of the first display area interposed between the second and third display areas. Because the claim is dependent on claim 16, which only recites 2 display areas, the phrase "third display areas" lacks antecedent basis. It appears that the claim should have been dependent on claim 17, which does recite 3 display areas. Since this appears to be a simple typographical error, and the examiner can easily determine what was meant by the claim, the claim is objected to rather than rejected under 35 USC 112. Appropriate correction is required.

Claim Rejections - 35 USC § 102

46. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

47. Claims 1, 4, 5, 7, 11, 16-18, 21, 22, and 25 are rejected under 35 U.S.C. 102(b) as being anticipated by Trueblood (U.S. Patent 5,748,189).

48. As to claims 1, 11, and 22, Trueblood discloses a display comprising:

at least two display devices (fig. 5, elements 62 and 64), each display device having a display area with a given display resolution wherein the display resolution of at least one display area is different from the display resolution of at least one other display area (col. 8, lines 5-11; displays with different resolutions are disclosed), a

Art Unit: 2628

boundary wherein the boundary of each display area is at least partially contiguous with the boundary of at least one other display area (fig. 4; col. 6, lines 53-66; the screens are shown being contiguous with each other), and an associated image processor for providing image information data (fig. 5; elements 66 and 68; col. 7, line 66-col. 8, line 11; each screen has its own image processor), the display devices being so constructed and arranged such that when a single image is displayed across the at least two display areas using image information data received from the associate image processors, the resulting displayed image is perceived as substantially continuous to a viewer situated to view the image (fig. 4; col. 7, lines 46-54; col. 1, lines 29-44; the image is an airspace divided into portions; fig. 4 clearly shows that the airspace would appear substantially continuous if the coordinates are mapped the way they are shown) and the displayed resolution of the portion of the image displayed on one of the at least two display areas is different than the displayed resolution of the portion of the image displayed on at least one other of the at least two display areas (col. 8, lines 5-11; the displays and graphics cards use different resolutions);

and an image replicator configured to generate at least two different scale factors to scale the image information data displayed on corresponding ones of the at least two display devices, wherein the image information data is scaled by the at least two different scale factors for display on corresponding ones of the at least two display devices (fig. 5; element 78; the manager works as a scaler; col. 8, lines 5-11; displays with different sizes and resolutions are disclosed; *since the display has been shown to be continuous*, there *must* inherently be different scale factors involved in the images; if

Art Unit: 2628

an image displayed on a monitor with high resolution is continuous with one displayed on low resolution, the image must be scaled or the image will appear to be different sizes on each monitor and will not be continuous; note that this is accounted for by Trueblood in col. 11, lines 6-20 and col. 11, lines 42-56, where it is disclosed that scaling of a cursor movement must be different for each display of different resolution; it is not expressly disclosed, but it is plain to see to one skilled in the art that this is because, inherently, the scale factors of each display having different resolution are different).

49. As to claim 4, Trueblood discloses a display wherein first and second boundaries are at least partially contiguous (fig. 4; col. 6, lines 53-66; the screens are shown being contiguous with each other).

50. As to claims 5 and 25, Trueblood discloses a display wherein one display area is adjacent to another display area (fig. 4; col. 6, lines 53-66; the screens are shown being adjacent to each other)

51. As to claim 7, Trueblood discloses a third display device (fig. 4) having a third display area with third display resolution, wherein the third display resolution is different from at least one of the first display resolution and the second display resolution (col. 8, lines 5-11; col. 11, lines 42-56; a third display with different resolution is disclosed), and a third boundary (fig. 4).

52. As to claim 16, Trueblood discloses a display wherein there are two display areas (fig. 5).

Art Unit: 2628

53. As to claim 17, Trueblood discloses a display wherein there are 3 display areas, a first display area, a second display area, and a third display area (fig. 4; col. 11, lines 42-56)

54. As to claim 18, Trueblood discloses a display wherein there are 5 display areas (fig. 4).

55. As to claim 21, Trueblood discloses second and third display areas spaced apart with a portion of the first display area interposed therebetween (fig. 4; if it is assumed that screen 3 is the first display, screen 1 is the second display, and screen 4 is the third display, then a portion of the first display- screen 3 is in between the second- screen 1 and the third- screen 4).

Claim Rejections - 35 USC § 103

56. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

57. Claims 2, 3, 12, 13, 23, and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Trueblood.

58. As to claims 2, 3, 12, 13, 23, and 24, Trueblood does not disclose using an LCD display or a projector/projection surface. However, official notice has been taken of the fact that these display devices are very well-known in the art (see MPEP 2144.03). It would have been obvious to one skilled in the art to modify Trueblood to utilize an LCD

Art Unit: 2628

display or projector/projection surface in order to increase compatibility with modern display systems.

59. Claims 6, 8-10, 14, 15, 19, 20, 26, and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Trueblood in view of Gennetten.

60. As to claims 6, 14, 26, and 27, Trueblood does not disclose a display that surrounds another display. Gennetten, however, discloses a display wherein the first display area is surrounded by the second display area (figs. 2 and 3). Gennetten also discloses two separate display devices (col. 9, lines 16-29) that are contiguous (figs. 2, 3, 4, and 5), such that a single image is continuous across the two display areas (col. 2, lines 21-33; large images are displayed across both displays continuously). The motivation for this arrangement is to enable detailed view of an image without unnecessarily wasting power, since a surrounding screen can be turned off (col. 1, line 61-col. 2, line 19). It would have been obvious to one skilled in the art to modify Trueblood to display an image continuously over one device that surrounds another in order to enable detailed view of that image, but also save power as taught by Gennetten.

61. As to claims 8, 10, 15, and 19, Trueblood discloses at least 3 display areas as in fig. 4. Gennetten further discloses a display wherein the first display area fully surrounds the second display area as described in the rejection to claim 6. The teachings of Gennetten can be equivalently applied to a three display system, creating a three display system in which two displays are surrounded by another display, and in

which a display is surrounded by a display which is surrounded by another display.

Motivation for this combination can be found in the rejection to claim 6.

62. As to claim 9, Trueblood discloses second and third display areas spaced apart with a portion of the first display area interposed therebetween (fig. 4; if it is assumed that screen 3 is the first display, screen 1 is the second display, and screen 4 is the third display, then a portion of the first display- screen 3 is in between the second- screen 1 and the third- screen 4).

63. As to claim 20, examiner has interpreted this claim as if it depends on claim 19. Trueblood discloses at least 3 display areas, wherein two are spaced apart, as in fig. 4, and in the rejection to claim 9 above. Gennetten further discloses a display wherein the first display area fully surrounds the second display area as described in the rejection to claim 6. The teachings of Gennetten can be equivalently applied to a three display system, creating a three display system in which two surrounded display areas are spaced apart. Motivation for this combination can be found in the rejection to claim 6.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to AARON M. RICHER whose telephone number is (571)272-7790. The examiner can normally be reached on weekdays from 8:30AM-5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kee Tung can be reached on (571) 272-7794. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2628

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Aaron M Richer/
Primary Examiner, Art Unit 2628
5/10/08